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MACHINISTS AND BLACKSMITHS JOURNAL

JOHN FEHRENBACH, EDITOR.
CLEVELAND, OHIO.

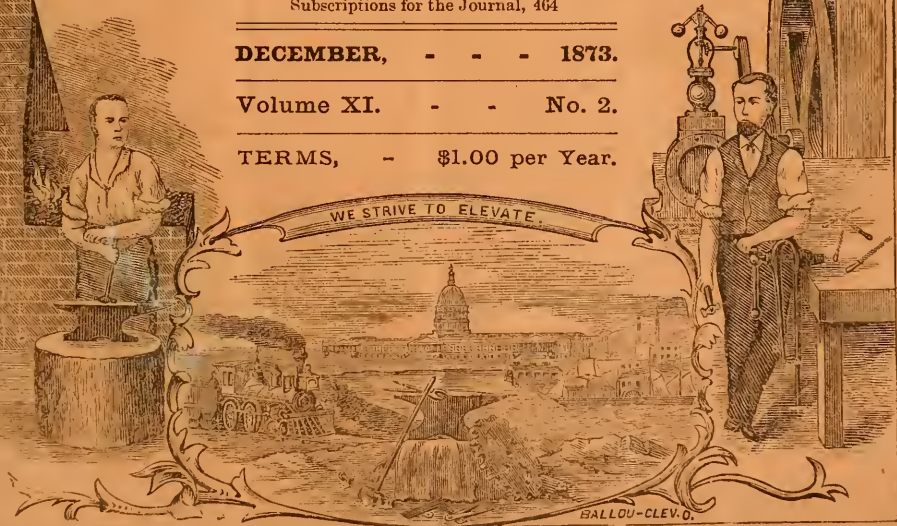
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DECEMBER, - - - 1873.

Volume XI. - - - No. 2.

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JOHN FEHRENBATCH,

No. 88 Seneca Street, Cleveland, Ohio.

Journeymen Machinists and Blacksmiths residing on the continent of North America, desiring to organize Unions to act in concert with those already organized, can obtain all necessary information relative to the formation of Unions under the jurisdiction of the International Union of North America, by addressing

JOHN FEHRENBATCH,

No. 88 Seneca Street, Cleveland, Ohio.

MONTHLY JOURNAL.

JOHN FEHRENBATCH, EDITOR.

VOL. XI.—No. 2. CLEVELAND, OHIO, DECEMBER, 1873. \$1 PER YEAR.

Scientific.

A NEW SUBSTITUTE FOR THE BESSEMER PROCESS.

The Philadelphia correspondent of the *Iron Age* furnishes an interesting item to this effect:

There have been so many plans suggested to improve on, or substitute for, the Bessemer process of late years, that it would at first sight seem idle to report any new processes. A plan has, however, been exhibited here of late which has undoubted merit and some possibilities of success. The inventor proposes, and has patented, a cheap and efficient application of the air blast to the iron as it runs from the blast furnace, or, if preferred, from a cupola furnace. At first it was proposed to claim only a partial decarbonization of the iron, but results and theory show that the total decarbonization may be made. The process is difficult of description without a diagram, but I will attempt it as lucidly as possible.

The plan proposes to attach to the blast or cupola furnace a pipe leading from, and attachable to, the tap-hole, whence the molten iron is conveyed over a series of plans or benches covered with fire clay and pierced with numerous openings of varied diameter, decreasing in size on each bench, and largest nearest the furnace. These benches extend each under the preceding one for half its length, and diagonally through terraced air spaces formed thereby runs a pipe conveying heated air from the hot blast oven or other combustion chamber for the purpose. This pipe is supplied with a separate valve to control the admission of air as desired. At the bottom of this flight of stairs or benches the metal may be conducted to the ordinary pig bed on the casting floor, as partially decarbonized pig, or received into a tank lined with fire clay and heated by waste products of combustion, entirely decarbonized and then recarbonized to the desired point and cast into

ingots. The theory is, that the iron falling in minute quantities through the sieve-like holes of the benches becomes thoroughly exposed to the oxidizing influence of the blast, acquires greater fluidity and passes over and through the second bench again, encountering blast and further oxidation, and is received in the tank from the last bench before it can have become pasty and "come to nature," while the additional advantage is attained by eliminating the silicon during the process. Claim is also made of dephosphorizing the metal to a greater extent than has ever been done by any like method, but this is not admissible without direct and continued evidence in demonstration. The main point is, granting the practicability of the process on a large scale, that it is inexpensive; a couple of thousand dollars or less being sufficient to erect the plant in connection with a blast furnace or cupola. Such an invention is at least worthy of trial on a large scale, and in any other season would, doubtless, find takers. The success met with in England with the iron coke process should make manufacturers willing to divest themselves of some of their former prejudices against new things, and induce more enterprise. It is certain that a furnace in West-

ern Pennsylvania has found its accounts in making a partially decarbonized pig metal, made by means of the admission of atmospheric air through the metal while casting, and this is an improvement and extension of the same idea. The Bessemer plant is certainly a fearfully expensive undertaking for the results obtained; the Martin process has, thus far, accomplished what was hoped, and he who can give us a cheap metal akin to steel, with its many good qualities, deserves at least a patient hearing and a chance of trial.

IRON MINES IN CALIFORNIA.

San Francisco is excited over the discovery of inexhaustible iron deposits. Though the mines began to attract attention a couple of years ago, the fact that they are really of great value was not fully established until quite recently. In Eldorado county a mountain of iron has been discovered, and a company to work the ore is being formed. It is expected that the deposits are sufficiently large to enable the Golden State to supply Mexico, British Columbia, Central America, the western coast of South America, Australia, and the isles, with all their needs. So says an exchange.

CASTING IRON IN SAND MOLDS.

In Fairbairn's *Iron Manufacturer* we find the following account of the first successful attempt in England to run cast iron in molds of sand :

In 1706, John Darby, one of the four partners of the brass works known as Baptist Mills, at Bristol, England, conceived the idea that cast iron might be substituted for brass, and prevailed upon some of his workmen to try and make iron casting in molds; but they failed, and considerable loss was incurred in their experiment.

At this time a Welsh shepherd boy, named John Thomas, succeeded in rescuing a flock of his master's sheep from a snow drift; and later, in the spring of the same year, during heavy rain and the melting of the snow, he swam a river to fetch home a herd of mountain cattle. These he collected and drove to the river, but the ford had now become a boiling torrent. He, nevertheless, crossed it on the back of an ox, and brought home the whole herd in safety. As a reward for his courage, his master presented him with four of the sheep which he had saved. He sold their wool in order to buy better clothing for himself, and afterward disposed of the sheep, so that he might obtain money wherewith to travel to Bristol, and seek his fortune.

Afraid of being pressed for a soldier if found in Bristol out of place, as it was then the time of the Duke of Marlborough's wars, he requested his master to recommend him as an apprentice to a relative, who was one of the partners of the Baptist Mills. The boy was accordingly sent into the brass works, until he should procure employment. As he was looking on during the trials of the Dutch workmen to cast iron, he said to Abraham Darby that he thought he saw how he missed it. He begged to be allowed to try, and he and Abraham Darby remained alone in the workshop the same night for the purpose. By morning they had cast an iron pot. The boy Thomas entered into an agreement to serve Abraham Darby and keep the secret. He was enticed by the offer of double wages to leave his master; but he continued nobly faithful, and afterward showed his fidelity to his master's widow and children in their evil days. From 1709 to 1828 the family of Thomas were confidential and much valued agents to the descendants of Abraham Darby. For more than one hundred years after the night in which Thomas and his master made their successful experiment of producing an iron casting in a mold of fine sand, with its two wooden frames and its air-holes,

the same process was practiced and kept secret at Colebrook Dale, with plugged key holes and barred doors.

The sleeping partners at Baptist Mills became dissatisfied with Darby, believing that he had lost his judgment, and was wasting money in fruitless experiments. The partnership was consequently dissolved, and Darby drew out his share of the capital. He took a lease of the furnace at Colebrook Dale, and removed with his family to Madely Court in 1709, John Thomas accompanying him. While Abraham Darby lived, affairs prospered; but, unhappily, after death, a brother-in-law, in whom he had confided, acted dishonestly toward the widow and family, and even defrauded some of the workmen.

Young Abraham Darby entered upon the management of the Colebrook Dale Iron Works about 1730. As the supply of charcoal was failing, Abraham Darby attempted to smelt with a mixture of raw coal and charcoal, but did not succeed. Between 1730 and 1735 he determined to treat pit coal as his charcoal burners treated wood. He built a fire-proof hearth in the open air, piled upon it a circular mound of coal, and covered it with clay and cinders, leaving access to just sufficient air to maintain slow combustion.

Having thus made a good stock of coke, he proceeded to experiment upon it as a substitute for charcoal. He himself watched the filling of his furnace during six days and nights, having no regular sleep, and taking his meals at the furnace top. On the sixth evening, after many disappointments, the experiment succeeded, and the iron ran out well. He then fell asleep in the bridge house, at the top of his old fashioned furnace so soundly that his men could not wake him, and carried him sleeping to his house, a quarter of a mile distant. From this time his success was rapid. To increase the power of his water wheels of twenty-four feet diameter, he set up a fire engine (*i. e.* an old atmospheric steam engine) to raise water from under the lowest and send it to the upper pond, which supplied water to the works, and put in motion the largest bellows that had been made. He obtained additional leases of valuable minerals, and erected seven furnaces with five fire engines. In 1754 the first furnace at Horsehay was blown in. In December, 1756, Horsehay's work was declared to be a top pinnacle of prosperity, twenty and twenty-two tons per week, and sold off as fast as made, at profit enough. Iron rails were laid down for the tram wagons between Horsehay and Colebrook Dale about that time.

AGRICULTURAL MACHINERY.

The progress of agriculture as an art is one of the stock subjects of technical journalism, simply because it is one of the most notable evidences of modern industrial development. From the time when enthusiastic but ill-informed projectors drew on paper marvellous and impossible combinations of swinging scythes, toothed gears, and driving wheels, up to the present, when California mechanics make ten-horse machines for cutting, threshing, winnowing and packing grain at one operation, farm mechanism has been foremost of all: alike in the rapidity with which its different departments have been elaborated and the financial benefits conferred by it upon the world. We are, moreover, too apt to believe that the practical application of mechanics to farming already made has nearly reached its limit; that the steam plow, the steam harvester, the steam ditcher, etc., etc., are but the dreams of visionaries, shadows never to be represented by substantial facts. But this is to be doubted much.

The truth is that in this, as in many other things, there is "too much talk and too little cider." Too much enthusiasm in projecting and too little pluck in work-

ing out the solution of difficult questions in agricultural engineering. It ought not to be more difficult to invert a furrow through soft ground by the aid of an engine, than to turn a gun stock by the same agency, and the mechanical skill that could devise ways and means of planing crooked planks "out of wind," should accomplish many apparently minor things, such, for example as providing mechanism for dragging the roots of quack grass to the surface for subsequent destruction by fire, or a plow or seeding device for sowing peas and covering them with a quarter of an inch of soil, which no apparatus has as yet successfully done. We say nothing, at any length, of the much more easy task of adapting small stationary engines and boilers to barns and farm buildings, for cutting feed by power, steaming fodder, cooking roots, etc., by steam from the boiler, in winter, and hoisting hay and grain-in-the-straw during the season of harvest. These are things that are sure to come with an advanced farming, but for them we must perhaps wait yet awhile.

We might fill a page with specifications of needed improvements in the usual engineering of the farm; many of them of equal importance with the most notable of

those just indicated. But every manufacturer can find by personal investigation the short comings of present practice, and can lay his hands on the ways and means of remedy. Perhaps during the present stagnation of business few better methods of passing otherwise wasted time could be found than in the elaboration and scrutiny of improvements passed over in the crush and hurry of more prosperous days, but which will have a money value when money revives, as, in a few months at the farthest, it must most assuredly do.—*Newark (N. J.) Manufacturer.*

BOILER INSURANCE.

The Hartford Steam Boiler Inspection and Insurance Company makes the following report of its inspections in September, 1873:

The number of visits made during the month were 1,465; boilers examined, 2,858; internal examination, 792; external, 2,738. The hydraulic pressure was applied in 236 cases. Total number of defects discovered was 1,199, of which 287 were regarded as dangerous. The defects were as follows: Furnaces out of shape, 41—11 dangerous; fractures, 110—43 dangerous; burned plates, 67—25 dangerous. Several of these cases resulted from the neglect of the fireman to try the gauge cocks

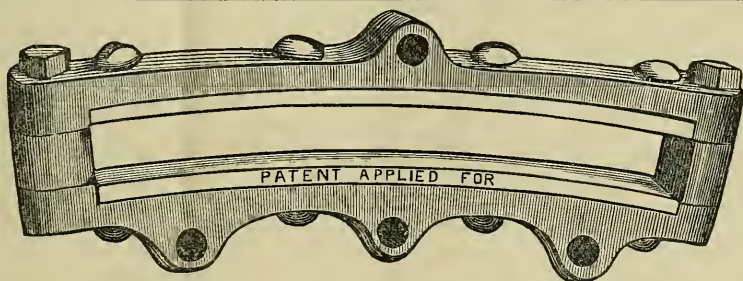
before starting fire in the morning. The boilers were blown down Saturday night, and then refilled; but the blow-off cock did not close tight, or defect in the check valve in the feed water pipe allowed the water to run out of the boiler before Monday morning. The red hot, warped and twisted plates soon gave notice of the situation. Blistered plates, 202—28 dangerous; deposit of sediment, 223—27 dangerous; incrustation and scale, 210—24 dangerous; external corrosion, 70—14 dangerous; internal corrosion, 34—14 dangerous; internal grooving, 12—6 dangerous; water-gauges defective, 79—14 dangerous; blow-out defective, 26—11 dangerous; safety valve overloaded, 43—15 dangerous; pressure gauges defective, 189—24 dangerous; errors ranging from —44 to +7 pounds. Boilers without gauges, 61—8 dangerous; deficiency of water, 5—3 dangerous; braces and stays broken, 54—19 dangerous; boilers condemned as unsafe to use, 8.

A mass convention of inventors, manufacturers and others, interested in patents, is to be called soon to take steps toward the formation of a United States branch association for the furtherance of the objects of the International Patent Congress held in Vienna.

IMPROVED LINK.

The attention of all persons interested in the manufacture or repairing of locomotive engines is respectfully called to the "cut-off" given below, the only improvement in the link for a quarter of a century. Those acquainted with the difficulties to be overcome in the taking up of lost motion in all links in use at the present time, will readily compre-

as not possessing the necessary strength. This improvement combines durability, cheapness and simplicity. It consists in placing inside of the link two plates of hardened steel, in such a manner that all the friction is directly upon them. When once finished it is done, no case-hardening being required, as these strips will last for years, with no perceptible wear, and when they finally become worn to such an extent as



prehend the advantages to be gained by the adoption of this contrivance. In the construction of the ordinary wrought iron link, the principal objections are these: After it is finished it is subjected to the process of case-hardening. This always involves considerable time and consequent expense, which must be repeated every time it is repaired. Attempts have been made to overcome this by the use of cast-iron in their manufacture, which could be easily and cheaply replaced when worn, but after being thoroughly tested, they have been cast aside

to need overhauling, it is an easy matter to adjust, or, if necessary, replace them. This obviates the necessity of annealing and re-hardening the whole link.

This is a brief description of the improvement, and nothing is claimed for it that it does not merit. The master mechanics of some of our leading roads are highly pleased, and pronounce it a decided success. It has also been presented to mechanical experts in Washington and Cincinnati for their opinion, and pronounced the only practical improvement on the link since the

introduction of locomotives in the United States. This will be sufficient to convince all practical men of its advantages over the ordinary link, and we have no hesitation in stating that it is simply a question of time as to its universal adoption. For further particulars to those wishing to interest themselves, apply to A. J. Donovan, Pan Handle Railroad Shops, Indianapolis, Ind.

SAVING THE WASTE OF COAL MINES.

Many economists have mourned over the waste of good fuel attendant upon the mining of coal, and have puzzled their heads for some means of saving the twenty per cent. or so of material that goes to dust in the mining process. Numerous inventions have been made for utilizing this waste, but the one seeming to promise the most satisfactory results is a machine now on exhibition at the American Institute at New York, and the invention of Mr. Louiseau of Mauch Chunk. This is the method of manufacture: Clay, which is used as the binding material, is poured in through one hopper, the coal dust through another, the substance falling into equally revolving partitions, on two separate shafts, the partitions that take the coal waste receiving and delivering nineteen times as much as those that take the clay.

As the coal and clay fall together they are sprinkled with the milk of lime, which the machinery delivers in due proportion. The moistened mass is carried by a screw propeller into the mixing machine. The plastic product is forced thence, by a series of knives and a screw propeller, arranged on a central shaft, giving a pressure of several tons to the inch, through an aperture, upon molding rollers which receive it in ovoid cavities. From these the lumps are delivered in shape and size like hens' eggs, and are then immersed in a solution of rosin, which gives them a water-proof covering. The cost of manufacture at the mines is eighty-five cents per ton.

BIG GUNS.

The Prussians flatter themselves that they have the most powerful guns in the world in the recent specimens added to their artillery as siege guns. Their performances are remarkable. With a charge of one hundred and twenty-five pounds of powder they project a cast-iron shell of six hundred pounds with an initial velocity of sixteen hundred feet per second, which is said to have never been attained before by any rifled gun. At a distance of twelve hundred paces, or nine hundred and eighty-eight yards, these guns send the shell clean through a fourteen-inch armor plate and backing.

Editorial.

ARE THEY MEN?

Recent development of circumstances in the city of Knoxville, Tenn., has brought to the surface a set of men whose pusillanimity, cowardly and degrading conduct in connection with a recent strike on the East Tennessee, Virginia and Georgia Railroad is without a parallel in the history of our country; for creeping, cringing, fawning cowardice the action of these men surpasses anything we have ever been called upon to chronicle. The principal actors in the disgraceful drama we are about to lay before our readers were machinists, blacksmiths and locomotive engineers, all of whom embarked in a strike against a reduction in their wages of 20 per cent. The mode of warfare adopted was that of stopping trains by intimidation and threats made at those who undertook to run locomotives during the strike. It must be borne in mind that neither the Machinists and Blacksmiths' International Union nor Grand International Division of Locomotive Engineers gave their sanction or endorsement to the men who embarked in the strike. The members of our organization who were engaged in the strike

participated in the same against not only the expressed wishes of the President of the International Union but in open violation of our law governing strikes, and whatever they did they did entirely upon their own individual responsibility. Their action did in no way, shape or manner concern the Machinists and Blacksmiths' International Union. But here comes the turning point. When the President of the International Union saw the entanglement into which hot-headed, rash and inconsiderate men had plunged themselves, his interference became a matter of necessity; and in order to save the little homes of these men, whose actions were fast placing them in jeopardy, by their stopping trains, against which the company very justly threatened suit, he sent the following telegram to the Deputy President:

CLEVELAND, O., Nov. 8, 1873.

E. B. Mann, Knoxville, Tenn.:

The Machinists and Blacksmiths' International Union does not approve of the course pursued by the strikers; our members are advised to return to work.

(Signed) JOHN FEHRENBACH,
President of the International Union.

In reply to a telegram received November 3d, asking the President to go to Knoxville immediately, the following dispatch was sent:

CLEVELAND, O., Nov. 3, 1873.

E. B. Mann, Knoxville, Tenn.:

Cannot come. I have sent a circular; act upon the advice contained therein.

(Signed) JOHN FEHRENBATCH,
President of the International Union.

The circular referred to was mailed on the 31st of October, and contained a strong protest against strikes, and advising our members to meet their employers half way, and, if possible, settle all difficulties with them peaceably and through arbitration, but in no case to inaugurate a strike. It will be seen that the International Union is free from all complications with the strike, at least so far as aiding, abetting or urging the men to embark in such an enterprise. But from the cowardly action of some of the men it would seem that the International Union is made responsible, and, in order to save themselves, the Union is made the scapegoat. We copy the following from the *Knoxville Daily Chronicle*, which explains itself:

KNOXVILLE, TENN., Nov. 11, 1873.

Capt. Jos. Jaques, V. P.:

We have been connected with the late trouble that you had with the employees of your road. We now acknowledge that we were in error in being in any way influenced by the excited crowd. We further say to you, that we are determined, and will immediately withdraw from the organization known as the Machinists and Blacksmiths' Union, and if you think proper to employ us again we will work for you as faithfully

as we ever did before, notwithstanding the reduction of wages, as per your order of October 30, 1873.

MACHINISTS.

C. W. Fisk,	J. P. Campbell,
Thos. Munsey,	Jas. McCampbell,
Andrew Anderson,	J. R. Moore,
Michael Kennedy,	E. B. Mann,
J. H. Shepherd,	A. Mosley,
S. Simcox,	R. G. Johnson,
J. H. Hixcox,	A. W. Anderson,
Samuel Nance,	Patrick Horrigan.

BLACKSMITHS.

Thos. McDonald,	F. A. Cumming,
C. D. Munsey,	Wm. Burchell,
John Bradford—Apprentice.	

KNOXVILLE, TENN., Nov. 10, 1873.

Capt. Jos. Jaques, V. P.:

During the late trouble that you had with the employees of your road, we acted under the impression that we were doing our duty. We fought you manfully, and, as we considered, honorably, for one long week. We now acknowledge that we have been beaten, and that we were in error in going off with the excited crowd. We further say to you that we have withdrawn from the organization known as the Brotherhood of Locomotive Engineers, and if you think proper to employ us again we will work for you as faithfully as we ever did before, notwithstanding the reduction of wages, as per your order of October 30, 1873.

ENGINEERS.

J. R. Moore,	A. B. Minton,
Samuel R. Tuggle,	Thos. H. Wilson,
Wiley B. Wright,	W. H. Gardner,
George Shetterley,	J. Staub,
Alex. Farmer,	W. H. Hackney,
M. W. Frawley,	Wm. Brewer,
L. Bryant,	Ed. Brown,
Matt. Franklin,	E. Wetherford,
D. H. Holloway,	Jas. McCampbell,
J. Wetherford,	Solomon Onkst,
M. Nabb,	N. Long,
M. G. Leet,	C. J. Harvey.

The following dispatch was sent out by Captain Jaques yesterday evening through the Associated Press Agency:

E. T., V. & G. A. R. R. Co., }
KNOXVILLE, TENN., Nov. 10, 1873. }

To prevent any misapprehension as to the true position of the engineers on the East Tenn., Va. and Ga. R. R. I will state that they have withdrawn from the organization known as the Brotherhood of Locomotive Engineers, and the charter of Knoxville Division, No. 115, has been delivered to me to be forwarded to Charles Wilson, Grand Chief Engineer, Cleveland, Ohio.

JOS. JAQUES, V. P.

What the Machinists and Blacksmiths' Union or the Brotherhood of Locomotive Engineers had to do with the Strike, we can not see, and why men should renounce either of these organizations in order to get their jobs back, we certainly cannot tell. It seems plain, however, that a surrender of the manhood of the men as a pre-requisite to secure their former situations, was one of the express stipulations of the officers of the Company.

We confess our utter inability to see wherein such humiliation on the part of the men can in any way redound to the interest of the Company, or add to the honor and manhood of those who complied with the requisitions of those requiring men to surrender their rights and prerogatives of American citizens. With the same propriety might the officers of the Road in question ask the men re-

cently in the Strike to renounce their respective religious creeds, as religion had about as much to do with the origin of the strike, and much less with the termination, than either the Machinists and Blacksmiths or Locomotive Engineers association. We feel confident, however, that had Capt. Jaques, Vice President of the Road, known the truth about the matter, instead of his sanction to such disgraceful exactions, he would have offered his protest.

It will be noticed that the most cowardly and degrading part of the entire proceedings is that of the Locomotive Engineers, who surrendered their Charter to the Vice President of the Company. Shame, base cowards, shame!— Was it not enough that they should leave the Brotherhood without offering such a gross insult? We certainly can find no excuse for such action, whatever excuse they may have had to surrender their manhood.

The same thing was attempted with reference to the Charter of the Machinists and Blacksmiths' Union, No. 4, of Knoxville, by some of the cringing, fawning cowards whose names appear attached to the unconditional surrender published above. But the loyal members of our Order flaunted defiance into their teeth and the degraded set slunk off

to hide their heads in remorse and shame.

The articles to which the signatures are attached are the productions of the officers of the Company, but are made to appear as though the men whose names are appended were the authors of their own degradation and humiliation in this particular. But the truth of the matter is that the men were induced to return to their work with the promise that as soon as the business of the Road would warrant, their wages would be placed back to the old standard. After they had returned to work, the disgraceful documents above were presented to them for their signatures, and signed; those who refused to append their names being promptly discharged.

It will be noticed that both documents attribute the error to "THE EXCITED CROWD." We understand that all of the Engineers, with one or two honorable exceptions, signed the document, and all of the Machinists and Blacksmiths with the exception of five or six. Therefore, to cast the blame upon the "excited crowd," is as silly as it is absurd, when the very men who make the assertion constituted the "*excited crowd*."

The document gotten up for the Engineers has a little more for-

mality and eloquence about it than the one presented to the Machinists and Blacksmiths.— They say "we fought you manfully and as we considered honorably for

one l — o — n — g week." And they ought to have added, "we are now prepared to surrender our honor and our manhood at the feet of our victors. We met the enemy and we are his'n."

Despite the humiliation of the "red-hot" strikers, we admire the indomitable will and pluck of Capt. Joseph Jaques. His action will teach men a lesson that it is not always wise to disregard the Rules of our Organization and plunge headlong into useless and uncalled for strikes. The humiliation brought to the strikers is simply the result of their own unbalanced judgments. Had they taken the advice of the President of the International Union, and obeyed the laws they obligated themselves to obey, they would not have got into difficulty. Our sympathy is therefore not with the poor, weak minded set who signed away their liberty, as they were among the most enthusiastic to advocate the strike which has ended so much to their discomfiture and disgrace. The men who opposed the entire affair from the very beginning, are among the only ones who refused to append

their signatures to a document which is not only degrading to those who signed it, but it reflects very little credit to the ponderous brain of its author. That one or two men should accomplish the degradation of so many intelligent (?) men (?) seems almost incredible, yet it is nevertheless a fact,—and never did the servile slaves of Siberia show such humiliation and such docility as that displayed by the “blood and thunder” orators who brought on the late difficulty with the East Tennessee, Virginia and Georgia Railroad.

In conclusion we will give these men a Biblical quotation for their earnest contemplation :

“Depart from me ye cursed, into everlasting fire.”

“WE SEEK NO ENTANGLING ALLIANCE WITH OTHER TRADES.”—Wilson, G. C. E.

If the Grand Fusilleer of the *B. of L. E. Journal* can find it convenient to deviate from the rule of thick-headed silence generally observed by him—except when a few words in the “soft-soap” line can be turned to good advantage on some railroad official—we would like to have him explain the following “no entangling alliance,” which we clip from the *Utica Observer* of a recent date. The editor, in speaking of a reduction in the wages

of the locomotive engineers of the N. Y. C. & H. R. R. R., which has recently taken place, says :

They say that they proved true to the interests of the company last winter when the conductors and brakemen struck for higher wages and quit work. When the helpers in the engine houses and shops quit work, the engineers and firemen cheerfully performed extra duties without demanding extra pay. In all cases of emergency they have stood at their posts by day and night, and are ready to do the same in the future.

The engineers say—so says the *Utica Observer*—that “when the helpers (machinists and blacksmiths) quit work the engineers and firemen cheerfully performed extra duties without extra pay.” We now ask the decrepid old fossil who assumes the editorship of the *B. of L. E. Journal*, suppose the engineers quit work for an advance in their wages, and the machinists (helpers) would step upon the foot-board, and “cheerfully” do the work of the engineers “without extra pay,” would their action be relishable or palatable to the faithful who have in all cases of emergency stood by the company against the machinists and blacksmiths? Come, Wilson, speak out; your silence will do no longer. The machinists and blacksmiths along the line of some of the most important roads want to understand the policy of the Brotherhood of Locomotive Engineers in reference to this matter.

A MODEL CHIEFTAIN.

There is a time for the development of all things. The different traits in men's characters often lay concealed in obscurity, merely because of the want of an opportunity to develop them. This seems to be particularly the case with a certain gentleman (?) who is at the head of one of our leading labor organizations, the headquarters of which are located in the city of Cleveland, Ohio.

Without referring directly to the hero of our story, by way of calling him by name, a phrenological survey of his impenetrable cranium may answer the purpose and enable the reader to get a more minute outline of the exact calibre of a specimen of humanity of the Pterodactyl persuasion. His head, although very large, does not impress one forcibly that the owner is very extravagantly blessed with a superabundance of brain; but one is soon convinced that what little there is of the cephalic extremity of his nervous system, is in a deplorable condition, superinduced, no doubt, by gross negligence on his part to cultivate in a proper manner those useful and indispensable organs.

But to proceed with our survey. We place our hand on the back of his head, on the center near the top, in search of the organ of

"self-esteem," and lo! instead of a bump of moderate size, we find the spot flat and a little inclined to be hollow, showing plainly that there is an absence of self-respect, which convinces one immediately that the individual is not endowed very plentifully with that manliness which can be found in one's adversary who in an honorable and gentlemanly manner conducts a controversy with his opponents; one who will not stoop to any under-handed work, but openly and manfully come out publicly and say whatever he has to say, and thus give his combatants an opportunity to defend themselves. He will not sneak off to newspapers—known to be deadly enemies to the cause of labor—with base misrepresentations, which he dare not print in a monthly journal over which he may have control. He will not stoop so low as to circulate printed falsehood and glaring, downright lies, to injure his opponents. He will not do as the subject of this sketch has done, circulate in Rochester, N. Y., with a view to injure the character and reputation of the editor of this JOURNAL, a paper that was printed in Cleveland, containing some of the most unwarrantable falsehoods, and such only as men in the lowest scale of manhood are capable of producing, and it will be remem-

bered that he is the individual who furnished the material out of which the wholesale lies were manufactured.

Upon further examination of his cranium we discover a sign which accounts for his disgraceful action toward one whom he has not the courage to meet in a fair and open argument. The sign we refer to is the organ of combativeness, which is situated behind and a little upward from the ear. We find the organ in a very diseased state, which explains the disposition to indulge in such low, mean, sneaking, cowardly actions as that referred to.

Many eminent men contend that phrenology determines a person's disposition, and hold that men are not responsible for acts predetermined by Dame Nature herself, and should not be held accountable for adherence to the inflexible laws inherent in the physical construction of mankind. Many men are afflicted with a weakness which oftentimes leads them to commit acts of a low, cowardly nature. This seems to be particularly the case with the hero-subject of our sketch. We, therefore, can forgive him with all our heart. We can carry no spite nor hold any animosity toward the decrepid, old, pharisaical pillgarlic of sneaking cowardice fame, and we merely write

this article, prompted by a charitable disposition, in the hope of contributing something that will induce the gentleman in question to pursue an honorable and upright course, if not for his own benefit we hope he will at least for the benefit of the organization he represents.

♦ ♦ ♦ LIFE INSURANCE. ♦ ♦ ♦

The recent scourge that afflicted the citizens of Memphis, Tenn., suggests to us some vivid lessons of the benefits of Life Insurance. Five of our members were compelled to succumb to the terrible ravages of the yellow fever, leaving behind them their widows and orphan little ones unprovided for. Not one of these men was insured, and it has created a doubt in our mind as to whether or not it would be a justifiable act on our part to ever again issue an appeal for aid in a case such as is the one presented to us at Memphis.

The members of our organization have an opportunity of securing a policy of life insurance for the very small price of \$2,50, after which they are called upon to pay only \$1,00 at the death of an insured member, which contribution has amounted to just \$4,00 per member for the past twenty-seven months. The united contributions at present amount

to about \$1000.00, which amount could have been secured to the widows and heirs of each of our deceased brothers at Memphis, for which they would have paid less than two dollars per year.

It certainly can be nothing short of criminal negligence on the part of any member who will not secure to his family a small competence in the event of his death particularly when it can be secured for so small an amount. We therefore say to our members, become insured immediately—obtain a policy in our Insurance Department, then in case of death your wives and children will not be put to the humiliation of asking a cold and heartless world for charity or alms. Provide for the ones you love while yet you have time. Do not expect the International Union to assist them if you yourselves do not provide for them. Many of our members who are insured, who pay in their regular contributions, object most decidedly to contribute aid when men could have become insured as well as not. We have asked our Unions to contribute as liberally as possible in order to relieve the wants of the families of our deceased brothers at Memphis, at the same time we doubted the legality of voting money out of the treasuries of the Unions for any such purpose. We there-

fore give notice that our members throughout the organization need not expect any more such aid, for the reason, first, it is injurious to the Insurance Department to raise donations such as have recently been raised for Memphis, because many men, if they know that the International Union will come to the assistance of their families, in the event of death, would not become insured merely to save the paltry sum which insured members are required to pay.

In conclusion we urge the members of all our Unions to become insured. Do not defer this matter from time to time, but make application to the agent of your Union immediately, and secure a policy on your lives without further delay.

A meeting was held at Bradford, England, on Tuesday evening, October 27th, under the auspices of the 'Trades' Council, to consider the advisability of bringing forward a labor representative as candidate for Bradford, at the next election. There was a large attendance of delegates representing various trades in the district. Mr. S. Shafton, President of the Bradford Trades' Council, presided. The proposition in favor of starting a candidate to represent labor in Parliament was received with great cordiality by the delegates, most of whom reported that they were instructed to say that pecuniary assistance would be rendered by their respective Unions.

PASSING EVENTS, NEWS, ETC.

New Unions.

The following new Unions have been organized since last reported: No. 30 of N. Y., Port Jervis, by the President of the I. U.; No. 1 of Vt., Rutland, by Special Deputy Frank H. Brown, of No. 1 of Mo.

The Traitors at Knoxville, Tenn.

Among the list of the names of those who proved traitors to our organization we find the names of three who deserve something more than a passing notice, namely: S A M U E L SIMCOX, who was a delegate to the Albany Convention, E. B. MANN, the Deputy President of the I. U., and J. H. SHEPHERD, late Treasurer of No. 4. We have not the space to do these arch traitors the justice their action merits. We, therefore, propose paying our addresses to them in the next issue of the JOURNAL. We will say this much however: had the Deputy interposed his authority, and demanded compliance with the laws of our order, no strike would have taken place, and the men who proved themselves traitors to the principles they had espoused would have saved themselves the lasting disgrace of having their names placed in the same category with Judas Iscariot, who betrayed Christ for thirty pieces of silver. There is a distinction, however, inasmuch as Mr. Iscariot received thirty pieces of silver for his treachery, while the "red-hot" strikers have sold their honor, their manhood, and their liberty for the privilege of working for the enormous price of \$2.52 per day. If the International Union had anything to do with the strike, except to induce these men not to strike, we should have said not one word in reference to the affair; but when we take into consideration that these men plunged into the strike in direct opposition to our law, the enor-

mity of their treachery is easily comprehended. The press of the country has taken the matter up and published the names of the men who sold themselves, and as we feel desirous to add to the popularity of these individuals, we have concluded to have a suitable engraving made, representing a monument erected to the memory of the defunct, with the names of the traitors inscribed thereon, all of which will appear in the January issue of the JOURNAL. In the meantime, if there be any among them who have anything to say as to why their names should not appear, we will give their excuse due weight and consideration.

Extraordinary Inducements to Canvassers.

One hundred fine gold M. & B. Badges will be given as prizes to canvassers for the JOURNAL. A handsome \$4.00 fine gold badge will be given for every fifteen yearly paid-up subscribers. An extra fine gold badge, with cross-bar and pin attached, worth \$5.00, will be given for every twenty paid-up yearly subscribers. Every member of the organization has now an opportunity to secure one of those handsome emblems of our order with little or no cost to himself. Every person sending in lists of from fifteen to twenty paid-up yearly subscribers, in lists of not less than five, will be entitled to a gold badge. Every list must state the prize desired.

Labor Reformer.


A communication from Altoona, Pa., signed "Labor Reformer," might probably be inserted if the name of the author accompanied it. We have stated repeatedly that no attention will be paid to anonymous communications.

On Strike.

The cigar makers of Milwaukee are out on strike. They paraded the streets headed by brass bands. The procession was very orderly and numbered about three hundred.

Another Old Bachelor Gone.

For thirty-three long and lonely years the charms of conjugal felicity failed to penetrate the granite heart of the "Fighting Editor" of the JOURNAL. The doors of secluded bachelordom were kept securely bolted. All efforts to destroy his life of single-blessedness proved abortive; all overtures looking to a change were rejected with unregenerate contumacy. Many a maiden poacher in search of cupid game found herself completely foiled in her endeavors to captivate and cage this unreconcilable matrimonial bird. One there was, however, who proved equal to the task. Cupid's darts were set to flying thick and fast; the Fighting Editor began to waver; his aversion for connubial happiness underwent a change; a strange metamorphosis took place; his stubborn resistance made way for a warm and gentle feeling, which soon ripened into heavenly love. We saw that his ailing was beginning to present a serious aspect, yet we entertained hopes for his recovery; but his case became hopeless, remonstrance was in vain. Maddened, frenzied love took the place of calm, dispassionate, sober reason. Little did we think he was a "goner"! But he was!! He was gone!!! The first opportunity was seized to carry his plans into practical operation. During our recent absence from the city he packed up his little bundle, folded up his tent, and stole silently and clandestinely away. His steps were turned toward the "Hoosier" Capital, where he finally landed safely. He proceeded at once to the office of Mr. Frank Reilly, Clerk of Marion County, Ind., and procured the necessary documents, and with his coat-tail at an angle of 45°, leaving distance behind him at a terrible rate, he started for Virginia avenue, to the residence of the bride, where he (Edward McDevitt) and Miss Mary E. Allen were united in

the holy bonds of wedlock, on the 18th day of November, 1873. May their years of matrimonial bliss be many; may they enjoy a happy life, and an endless term of unbroken affection. Our best wishes are with them wherever they go. May prosperity attend them through the journey of life. May a good, ripe, old age find them surrounded by many pledges of their married life to comfort them in old age and administer to their wants. In all this we represent the wishes of numerous friends and relatives of the happy pair, who congratulate the converted old bachelor and his young bride upon their embarkation on the matrimonial sea. May their skiff never be wrecked, but may it glide safely into the haven of its destination. Ed., old boy, give us your 

Our Journal.

With the next number commences the new year. By that time we hope to print at least 20,000 copies. This we can easily do if our members and our readers will lend a helping hand. Let each reader of the JOURNAL take it upon himself to send in at least one subscriber and the object will be attained. Let each member of our order begin a canvass for subscribers. The inducements we offer canvassers are as follows: To the person sending in one list of five paid up yearly subscribers, we will send the JOURNAL free for one year. To the members sending in fifteen paid up yearly subscribers in lists of not less than five will receive a handsome \$4.00 gold badge of our order. An extra fine gold badge with cross bar and pin attached, worth \$5.00, will be given to the member who sends in twenty paid up yearly subscribers, in lists of not less than five. A handsome picture of the "Great Iron Convention," 30 by 40 inches, will be given to the person sending in fifty subscribers, or to the Union, the members of which will send in fifty subscribers in lists of not less than ten. Now is the time to begin.

For the Consideration of our Members.

The relentless manner in which railroad companies and other corporations have reduced the price of labor, and in a great measure forced workingmen into a condition of serfdom, has brought forth many suggestions as to the adoption of various plans of relief and protection in the future. To our mind, however, the only feasible plan that can be adopted will be a plan looking to the abolition of the wages system. This can be done only through the adoption of co-operation. Our organization should take the lead in this matter. The next convention could very properly take the initiative step by levying an assessment of ten cents per month on each member of the organization, this assessment to be continued for a period of say four years; this would give us a capital of some \$50,000.00 which would enable us to build a very good shop in which every member of the organization would be a share holder and receive dividends in proportion to the amount of money he has invested. Or otherwise the proceeds of the shop might very properly be devoted to the establishment of similar shops in various sections of the country, where our members might go when out of employment. If this plan was carried out, in less than twenty-five years one-half of the machinists and blacksmiths of America could be working in their own shops and receiving the full value of their labor. Then there would be no more strikes or lock-outs; no more reductions in wages; no more prosecutions or persecution of our members, each man would be his own employer. There would be no more contention or disputes between employer and employee because of an antagonism of interests between the two. We think the subject worthy of consideration, and invite the attention of the leading minds in the organization to the matter.

Admission of Steam Boiler Makers.

About two years ago we commenced an agitation for the admission of steam boiler makers to membership in our organization. We felt confident at that time that an extension of the boundary lines of the Machinists and Blacksmiths' International Union would tend greatly to increase its usefulness, and at the same time be of great benefit to its members. Although two years have elapsed, we have yet seen no reason whatever why this change could not be profitably consummated at the Louisville Convention of the International Union. We are, therefore, immoveably in favor of the admission of steam boiler makers to membership in our organization. We call upon our members for an expression of opinion upon this important matter. Now is the time to discuss the question. We wish to impress upon the minds of our members that it is not proposed to admit the boiler makers in a body, but that they should be admitted the same as machinists and blacksmiths are admitted—each Union to make its own selections. If the boiler makers are anxious to become members, an expression from them through the columns of the JOURNAL would help their cause very materially. Our columns are at their disposal; let us hear from them.

State of Trade.

The indications are that trade will soon revive. Much, however, depends upon the action of Congress in the matter of authorizing the issue of at least 200 millions of dollars in greenbacks, call in the bonds now payable in national currency and thus save the interest on the bonds and compel the holders to seek other investments such as will give employment to the many thousands who are now out of work, many of whom are on the verge of starvation. If this is done the present state of affairs will soon be superseded by prosperity and plenty for all who are willing to work.

Is There any Justice in It?

The railroad companies, with surprising unanimity, have seized the flimsy pretext afforded by the financial panic to reduce the wages of their employees, while not a railroad corporation has reduced the freight or passenger tariff one single cent. True there may be a falling off in the traffic on some of the roads, but this furnishes no justification for reducing the wages of their workmen. Each railroad company could readily reduce its running expenses without inflicting an injustice upon the men who build or run their locomotives. If business is slack in the shop, the hours of labor can be reduced to correspond with the amount of labor required. No men need be discharged nor wages reduced. This plan, we feel confident, would be entirely acceptable to the railroad employees throughout the country. On the road, if there was a falling off of business so as to necessitate a discontinuance of a number of trains, the train men—such as engineers, firemen, conductors and brakemen—could all be retained and given a *pro rata* share of the work to be done in their line. Then, if a further reduction of expenses is found necessary, let the board of directors of such road cut down the extravagant salaries of the officers, from the President down to the Master Mechanic, who are receiving from \$3,000 to \$20,000 per annum. Here is where the principal leakage of the profits are, and the officers who are so anxious to enable their respective corporations to declare large dividends, could find here an exuberant field for improvement. Let them cut down their own salaries first; then, if they relish such rigorous economy, the under-paid mechanics, to whom railroad companies are mostly indebted, would have no particular objection to partake of a dose so much relished by the well-paid officials. We have always advocated the necessity of a mutuality of interests and feelings between the employer and employee, and

to continue our advocacy of this doctrine we do want some little encouragement. But if anyone can extract a morsel of that necessity from the recent actions of the majority of the railroad companies of this country toward their employees we would like to know how it is done. If the seizure of the first and every opportunity to cut down the wages of their workmen is an exhibition of their sympathy, railroad companies must not complain if the spirit of retaliation takes root among their employees.

A Good Idea.

The following preamble and resolutions were adopted by the Trades Assembly of Indianapolis, Ind., at its meeting on the 10th ult., and a copy ordered to be sent to each Union:

WHEREAS, A great many Union working men having been thrown out of employment by the effects of the panic, the stagnation of business and tightness of money,

And whereas, It is well known that a goodly number of those deprived of their daily labor, upon which they were dependent for the support of themselves and their families, are almost destitute of the necessities of life,—many in abject penury, and others verging on starvation—

And whereas, Deeming it one of the objects of this Assembly to devise measures for the alleviation of the wants and distresses of our workingmen; therefore be it

Resolved, That this Trades Assembly recommend to the various Unions represented in said body, the propriety of levying a weekly assessment (or voluntary contribution) upon their members of not less than two per cent on the wages of those having employment; that the funds so collected be placed in the hands of a certain delegate from each of the several Unions, to be by him turned over to a disbursing officer to be appointed by this Assembly, who is authorized to pay out the same on an order, signed by a designated delegate, to the effect that the applicant for relief is unemployed, a member in good standing of the Union the said delegate represents, the extent of his needs, etc., provided that no applicant shall receive more than the sum of \$5 per week in benefits.

Miscellaneous.

TO MOTHER.

[For the Machinists and Blacksmiths' Journal.]

I know that "Time" has altered thee
Since we last parted years ago;
And yet that change can only be
Like winter's softly falling snow—
Life's winter, dearest mother.

But though thy locks are silver'd now,
And dimmed thy vision it may be,
And care has often cross'd thy brow,
Thou still art beautiful to me—
Still beautiful, dear mother.

Time cannot ever mar thy face,
That it would seem to me less fair;
Not one sweet thought can it erase,
For love will ever linger there—
Forever, dearest mother.

Those hands that strove through childhood's
years
Such care and comfort to bestow,
Gave many a joy 'neath unshed tears,
That thou alone their want might know—
Were always thine, dear mother.

And though they may be wrinkled now,
The dearest they will ever be;
My heart can never wonder how,
They are so beautiful to me—
Yes, beautiful, dear mother.

God bless thee still for evermore,
And in that land that is more fair,
Upon that far-off golden shore
A rich reward awaits thee there—
A crown of glory, mother.

Far more than earth can ever give,
Or feeble lips can ever say,
A joy forever, that will live
When this frail earth has pass'd away—
And all of us, dear mother.

To meet where love shall still remain
True centered in a Savior's breast,
May we with Him forever reign,
Triumphant in eternal rest—
May none be missing, mother.

SERVABO FIDEM.

Logansport, Ind., Nov., 1873.

"Does one woman in fifty fill the lower half of her lungs with air?" is the stern inquiry of a sanitary exchange. The editor of that paper never heard the voice of an infuriated mother-in-law.

NOTHING BUT LEAVES.

[For the Machinists and Blacksmiths' Journal.]

Nothing but leaves, no golden sheaves—
How true of many a life!
How many spend the fleeting years
As if they were naught, and scoff the fears
Of Christian friends who speak 'mid tears
Of an unceasing strife!

Nothing but leaves, no golden sheaves,
A whole life lived in vain!
In dissipation, crime and sin;
No contest a heavenly crown to win,
'Gainst foes without and fears within,
No struggle heaven to gain!

Nothing but leaves, no golden sheaves,
At the great judgment day,
When Christ, the Almighty Judge, shall come
To gather all the harvest home,
When earth shall shake and heaven's dome
Shall roll as scroll away!

Nothing but leaves, no golden sheaves,
The dead before Him stand!
Opened the book of life to read,
Of every wicked thought or deed,
To judge the sower and the seed,
Sown broadcast o'er the land!

Nothing but leaves, no golden sheaves,
O! young man, pause and think
This very day may be thy last,
Death's arrows are flying thick and fast;
Now, ere thy sky be overcast,
O! rush from ruin's brink!

Nothing but leaves, the spirit grieves—
Will it be always so?
This day may end thy scoffs and jeers,
This day may end thy transient years,
'Mid sorrow deep, despair and tears,
'Mid bitterness and woe!

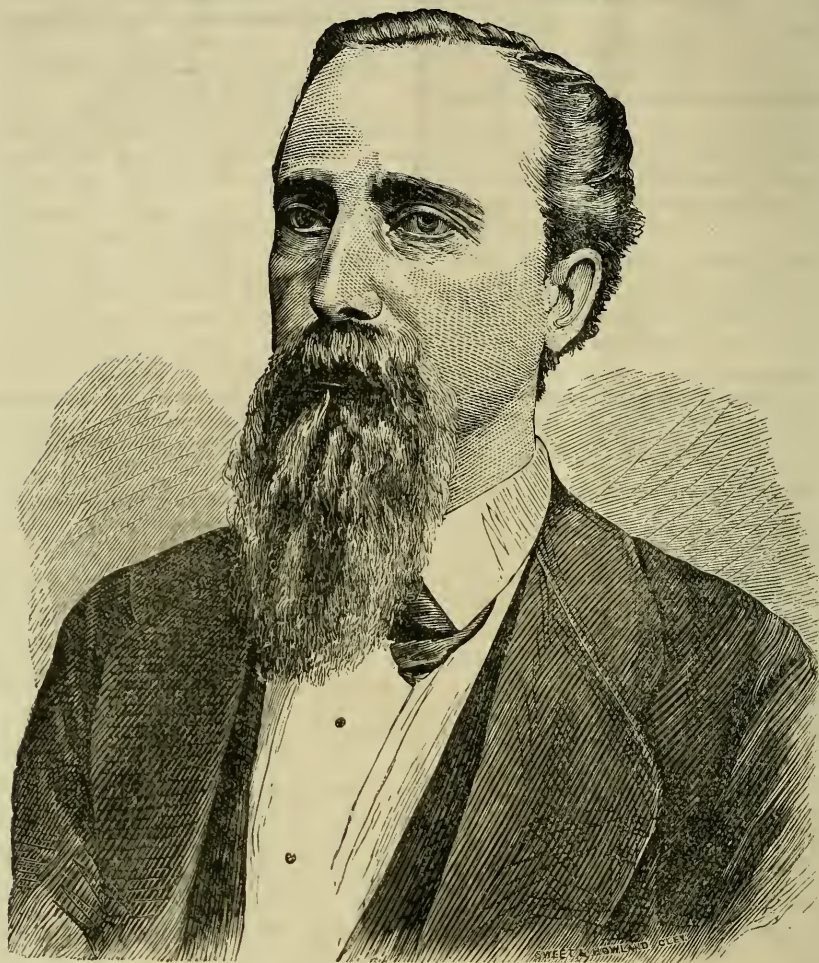
Nothing but leaves, the spirit grieves—
Then come to Christ to-day!
Come guilty soul, bowed down with sin,
Cast all your burden now on Him,
Just now the Christian life begin,
Just now begin to pray.

Nothing but leaves, nothing but leaves,
No golden fruit nor grain!
O! when before the Judge we stand,
Shall we appear at his left hand;
Or, with that bright, angelic band,
In heaven with Jesus reign?

JOTHAM H. ORR.

New Haven, Oct., 1873.

LABOR REFORM PORTRAITS.



John Fehrenbatch, President of the International Union of Machinists and Blacksmiths, and the subject of this sketch, whose portrait is given above, was born at Rochester, Monroe county, New York, on the 29th day of June, 1844. Left motherless at the tender age of three years, and compelled, through the poverty of his father, to enter the workshop in his eighth year, he entered

that school of hardship and toil which has given to the world its ablest orators, statesmen and leaders.

He first commenced work in a woolen manufactory, which was owned by Messrs. Douglass & Hollowell, being necessitated to begin work at six o'clock in the morning and continue until seven o'clock in the evening. He obtained the rudiments of a common-school edu-

cation by walking from the shop, two miles, to the night-school, which was then located on High street, near the old Erie canal; after school walking home, a distance of two miles more, and doing this without his supper, and that after working hard for twelve hours each day. This he continued for five winters.

On the 11th of April, 1857, his father bound him as an apprentice to a blacksmith, whose shop was located on the banks of the Genessee river, on State street, between Rochester and Charlotte toward Lake Ontario. He served out his time on the 10th of April, 1860, when he left his home for the first time, starting out in the world with just four dollars in his possession. He went to Peterboro, Ontario, paying three dollars and a half for his passage across Lake Ontario, and landed in Peterboro with ten cents in silver as his worldly possessions.

Not liking the blacksmith trade, and desiring to be a machinist, he went to a machine shop owned by Messrs. Mowry & Son, where, through the intercession of a kind friend, he was taken as an apprentice to the machinist trade. Shortly after his time was out he went to Ohio, arriving in Cleveland August 14, 1863. He went from Cleveland to Cincinnati and found employment in the shop of Charles Winchel. He left Cincinnati and went to Evansville, Ind., in February, 1864, accepting employment at the machine shop of Messrs. Cratz & Heilman. Two weeks thereafter he connected himself with an organization for the first time in his life; this organization was Machinists and Blacksmiths' Union No. 5 of Indiana, which Union still lives, and is in a flourishing condition.

In May of the same year he went to Indianapolis, Ind., where he remained until fall. In the meantime he was elected Vice President of M. & B. Union

No. 4 of Indiana. On the 11th of Nov., 1864, he landed in Nashville, Tenn., where he was employed by the government on the United States Military Railroad. He continued in the employ of the government until April, 1865, when he returned to Indianapolis, and went through a course in the Purdue College, (evenings) working at his trade during the day.

In July, 1865, he was elected Special Corresponding Secretary of M. & B. Union No. 4 of Indiana, with instructions to open a correspondence with the various trades' organizations throughout the state, with a view to obtain mutual action on the eight-hour question. Three months from the date of his appointment, and subsequent to the opening of this correspondence, a state convention was called to organize the Grand Eight Hour League of Indiana, Secretary of which he was elected. The agitation of the eight-hour question continued until nearly every city in the State was organized. At the fall elections, nearly every prominent politician was converted into an eight-hour man. When the election was over the workingmen thought their work done and abandoned the movement; and as soon as their organizations were abandoned, every office-holder who had pledged himself to use his influence in favor of the passage of an eight-hour law, repudiated his pledge. Here the eight-hour movement stopped in Indiana.

The next event of importance was his election as delegate to the Special Session of the National Labor Union, held in New York City, in July, 1868. In the fall of 1870, he returned to his old home, Rochester, N. Y., after an absence of ten years and a half. Here he remained six months, during which time he succeeded in building up M. & B. U. No. 7 of New York from a membership

of ninety-five to a membership of two hundred and twenty. He returned to Indianapolis in April, 1873. In June he was elected as a delegate to represent M. & B. Union No. 4 of Indiana in the Convention of the International Union, which convened in Cleveland, Ohio, in September of the same year. At that Convention he was elected President of the International body. When he accepted the office the organization had scarcely a membership of fifteen hundred in good standing, twenty-eight Unions, an income for the International Union of about \$1,200, and an expense of about \$3,500 per annum. He started into the field on an organizing tour in April, 1872. The South was organized first, then a portion of the Middle States, then the Western States; and he closed the year with sixty-eight Unions, which was a great success, considering the limited means placed at his disposal. His labors were continued until the meeting of the International Union, which took place in the Capitol Building in Albany, N. Y., in September, 1872. Ninety-five delegates attended, while two years before only twenty-four were present; one hundred and thirty-two Unions being represented against twenty-eight two years previous. Mr. Fehrenbach was re-elected by a vote which showed that his labors were duly appreciated.

Shortly after the convention, in connection with M. A. Foran, President of the Coopers' International Union, Wm. Saffin, President of the Iron Molders' International Union, and Harry Walls, Secretary of the Iron Molders' International Union, he commenced the agitation of the organization of an Industrial Labor Congress, and on the 14th day of July, 1873, at Cleveland, Ohio, his arduous endeavors were consummated by the organization of the Industrial Congress of the United States, of which organization he was elected its first President.

From the adjournment of the Congress up to the present time, he has labored assiduously for the advancement of not only the interests and welfare of the machinists and blacksmiths of America, but to ameliorate the condition of all who seek a livelihood by honest industry.

In personal appearance, Mr. Fehrenbach is prepossessing and dignified, and possesses features which readily indicate the depth and power which glows from the earnest eyes and make themselves manifest in the eloquent utterances of his lips. As an orator he is fluent and ready, his ideas original and fresh, and his ability purely natural. When we consider the many vicissitudes through which he has passed and the fact that he is but twenty-nine years of age, it is safe to predict for him a long career of success as a public agitator, and a defender and advocate of labor reform.—*Workingman's Advocate*.

OUR FUTURE WEALTH.

That our country is eventually to take the lead of all the world in wealth, must be plain to any one who fairly estimates her as yet undeveloped resources.

Since steam has been applied to commerce and manufactures, the productive coal fields of Great Britain have been her chief source of strength. These coal fields have been worked for a great number of years and many of them show symptoms of exhaustion. They are, moreover, insignificant in extent, as compared with what this country possesses. The aggregate area of the coal fields of Great Britain and Ireland is, at most, but 12,000 square miles, while that of the United States is at least 196,000 square miles. The coal area of Canada, mostly in Nova Scotia, is put down at 18,000 square miles.

If the quantity of coal in each given acre be about the same, then Nova Scotia is richer in coal than Great Britain ever was, and the United States is more than sixteen times as rich. In fact, according to elaborate estimates made by Prof. Rogers, the whole of Europe contains but one-twelfth the quantity of coal which exists in this country. The

present available quantity in the British Islands is estimated at 190,000 millions of tons, while that of France and Belgium is set down at 95,000 millions.

Coal and iron go together. One is, as it were, a factor to the other; without iron, coal would lose a large portion of its value; without coal iron ore would be comparatively worthless. Though unlike they are still nearly related in their range of uses. The iron engine is rendered serviceable through the power which coal supplies, and the iron horse and iron ship are propelled through the force which it develops.

The rich distribution of iron ores in close proximity to all our great coal measures is a prophetic indication of our future wealth. All history shows that wealth and population gravitate toward centers enriched by the valued presence of coal and iron. No other country is as well supplied as the United States in these twin agencies of wealth, power, and population, consequently no other country will be as wealthy, as populous, and as powerful.

Our largest coal field is that known as the "Great Appalaehian." Passing through Western Virginia, Eastern Kentucky, and Eastern Tennessee, it terminates in Alabama, where it makes its nearest approach to gulf and ocean waters. As yet this great field is comparatively untouched; but it is now attracting attention, and several blast furnaces for the production of iron have already been established, not only on the line of the Chesapeake and Ohio railroad, but in Alabama, toward the field's most southern extremity.

When the south is supplied with transportation facilities equal to those now existing in Pennsylvania, the coal and iron trade of Alabama will be a power in this southern land, greatly exceeding that which the coal and iron of the Keystone State are to-day in the land of Penn. The field is in every respect an inviting one. With a genial, healthy climate, a generous soil, and unparalleled facilities for the production of iron and other valuable minerals, Alabama must soon command the attention she deserves. New Birmingham and Sheffields will soon spring up within her borders, and New Manchester, also, for she has all the raw material at command which has built up England's textile city.

ON AN ENGINE.

"Many things," sang the greatest of Greek poets, "are ingenious, but there is nothing more ingenious than man." Had the poet, however, been able to exchange his sunny Athens for our land of fogs, and anticipating two thousand years, have found himself by my side on the engine of the express, he would probably have discerned a point in his remark which he never suspected when he made it. Men have achieved greater attainments now than taming the "proud necked horse," and steering under the waves that roar around him, and one feels a sort of regret that a poet who could so proudly appreciate and so eloquently celebrate those rudiments of the future triumphs of his race was never permitted to see them in the plentitude of their glory. I never fully realized the awful power of man till I took my place on the engine of an express train. A train at night is a spectacle of terrible magnificence anywhere, but we have become so familiarized with it that it has lost its force, and we simply regard it in the ordinary realistic light in which we look on any other casual object. We can stand unmoved on a railway, see the iron mass that whirls a helpless freight of our fellow-creatures fifty miles an hour past us, hear the scream and the rush, feel its hot blast on our face, and the earth trembling beneath our feet, without the slightest emotion. But take your stand on the engine itself and all is changed. Let the firm hand of the bronzed figure beside you fail—let the sharp eye read false the bits of flickering glass that twinkle in the distance—and you know well that in one minute you may be a shapeless mass of flesh. These feelings were not altogether absent from me when, I a few nights ago, mounted for the first time in my life the engine of one of the night expresses. We were to run about seventy miles without stopping, and I was advised by my friend the engine driver to provide myself with something hot, the air being very sharp in the early morning. Gradually the ears filled; presently the sharp whistle of the guard rang through the air, and an abrupt scream followed from the engine. The steam was turned on. A thrill of life seemed to vibrate through the iron frame of the huge mass of machinery before

me. It panted hard, and shooting up dense columns of vapor, began slowly to move. Easier and easier seemed the effort, and in a few minutes we were fairly on our way. On each side of us now were the open fields; the cattle lay motionless heaps, in the glimmer, careless and stirless, though we passed them so close; ever and anon the dark form of a grazing horse would betray a momentary restlessness as we shot by. The tall leafy trees, the hedges and brooks were sleeping in peace, and though there was no moon we could somehow see them distinctly. Sometimes we would pass a quiet country village. What a contrast to the mad hurricane of fire that was rushing past them! Our speed now seemed perfectly awful. The wheels bounded and sprang, and the roar was so deafening that when I tried to ascertain from the stoker close to me at what speed we were traveling, he could not catch a word, although I shouted at the top of my voice. The metals running parallel with us seemed dashing along in headlong chase after us, and telegraph wires dipped and twisted as I looked at them. Far in the distance I could discern masses of black, they seemed miles away, but in a few seconds they assumed the shape of bridges, and with a hollow whirl we shot them behind us. Presently I saw masses of lights, motionless heaps of trunks, signal-posts and lamps. Nearer and nearer we drew—it was a large station. Never shall I forget this scene. Just as we entered it the driver opened the furnace, and in an instant the white ghost-like smoke which floated like a banner over our heads was changed into a lurid mass of flame; the draught as we entered the station blew it about in every direction, and a blood-red mist enveloped the whole engine. In a blind fog, with the whistle screaming in my ears, the wild echoes booming and reverberating from every part of the roofed station, the hot furnace licking in the coal at my feet—I could see nothing, and I held tightly on the rail stunned and helpless. Again, into the night we passed as the confused mass of lights flashed by. I saw the signals change from white into a blood-red as we flew past, but it had no significance for me. Everything seemed mad. I never realized till then what an accident really meant, never understood the gratitude we all owe to the fine, conscientious,

laborious fellows into whose hands we entrust our lives. For the whole of that journey the driver's eye never wandered from the front, his keen, forward-searching face scarce one moment altered its position, and it was easy to see that the wear and tear incident to such prolonged tension had marked and marred his face ere its time. At last our speed slackened, and blood-red light flared on the metals before us, morning was lacing the clouds, and very glad was I to grasp the hands of my swarthy companions, and stepping on the platform at my destination wish them good-by and God-speed. With the roar of the engine still ringing in my ears, and the glare of the signals even yet vexing my eyes, I betook myself to rest, glad to get again on *terra firma*—gladder to have gained the experience I had gained.
—*London Paper.*

A WORKMAN'S PARADISE.

Imagine a square space of ground containing buildings, built in terraces or blocks, which would contain a population of 7,000 persons of the working class; convenient, well-built houses (no contract work), not devoid of ornament, facing wide streets, with trees planted along the kerbstones to please the eye and promote health; pathways of asphalt, for flags are so unyielding; spacious yards at the backs of the houses and little gardens in front; in the center of the square a recreation ground of three acres, with gymnasium attached baths, a public library, schools, and a co-operative store, all in a central position; and just imagine a five roomed house in such a locality, with every possible convenience and with rates and taxes paid, being let at a rent of 5s. 6d. per week. These are the advantages and blessings which are being placed in the way of London working men by the promoters of the Shaftsbury Park estate, on the Wadsworth Road. Two hundred houses have already been built, and the streets were formally opened the other day by the Earl of Shaftsbury, who, to use a sporting phrase, is always there or thereabouts when any movements for the good of the working classes is on foot. The scheme is above all praise, and the ultimate physical and moral good to those who have probably hitherto existed in pent-up London slums is inestimable.

VAST INTERESTS.

The vast interests involved in the embarrassments of A. & W. Sprague and Hoyt, Sprague & Co. appear from the list of their mills, works and manifold enterprises. Good judges say, however, that their suspension would not cause the suspension of a single bank in the state. Only three national banks—the Globe, First National and Second National—and two savings' banks, held largely of their paper. Many merchants might go under and distressful times would certainly ensue in Rhode Island from the complete failure of A. & W. Sprague. They run near 280,000 spindles and 28 printing machines in mills and print-works, and employed over 10,000 operatives. Their great print-works at Cranston employ 12,000 persons, and can turn out 40,000 pieces a week. At Natick, R. I., they run 70,000 spindles, and have 600 hands; at Arctic, R. I., they run 22,000 spindles, and have 5,000 hands; at Quidnick, R. I., they have 32,000 spindles and 500 hands; at Baltic, Conn., 83,000 spindles and 100 hands; at Central Falls, R. I., 32,000 spindles and near 500 hands; at Augusta, Me., 34,000 spindles and 700 hands. These cotton-mills supply their print-works with most of the print-cloths used by them, making about 35,000 pieces a week, when running on full time. All are now on half time. Beside their mills and print-works they run other great enterprises, both within and without the state. In Maine they have vast timber-mills, saw-mills, and like property, in which are employed great numbers of men during the lumbering season. In New Hampshire is more similar property of theirs. At Columbia, S. C., they own valuable water-power, and have a great stock forward. They also own much land in Kansas and Texas. In New York and Cranston, their real estate, improved and unimproved, is great in extent and value. They control in New York the Union railroad, owning all street railways, employing 300 men, 500 horses, and 100 cars, with capital stock of \$600,000, and valuation of property about \$800,000. Wm. Sprague is president of the Providence and New York steamship company, which has eight steamers, employs 500 hands, and owns property valued at \$1,000,000. This company,

it is claimed, will not be embarrassed because of the Spragues' embarrassment. Though they are the largest stockholders, they own a minority of the stock. A. & W. Sprague control, in Providence, the Perkins sheet-iron company and the Rhode Island horse-shoe company, having 300 hands when full, now running with one-half their usual force on half time; the Phoenix iron foundry, Elm-street machine-shop, Comstock stove foundry and the American horse nail company. They also own one-third of the stock of the well-known Rhode Island locomotive works, which employ over 1,000 men, and of the Nicholson file company. Their mill property, at a low valuation, is estimated at \$4,200,000, and their print works at 1,000,000. Their pay-roll at times has approached \$25,000 a day. Beside all this property of A. & W. Sprague, Hoyt, Sprague & Co. own most of the stock of the Atlantic Delaine Company, whose mills in Olneyville employ over 2,000 hands. On this property there is an indebtedness of near \$4,000,000.

A BRITISH PREDICTION OF THE FUTURE OF AMERICAN IRON.

Notwithstanding the efforts of our British exchanges to convince themselves and their readers that the importation of American iron into England is impossible, the very idea of such a thing seems to be a nightmare of horror to them. They cannot let the subject drop, even for a week. Says *Iron*, in its last issue:

"The tall talk of last week on the importation of American iron into Liverpool has been supplemented by assertions that the mills of Pittsburgh, Pa., are rolling boiler plates for Ireland, and that a large consumer in South Staffordshire has lately concluded a contract with a Pennsylvania rolling mill for 3,000 tons finished iron. Although many of the reports now flying about will be found destitute of foundation, there is little doubt that the Americans have succeeded in elbowing us out of the Canadian market, and that both Australian and South American purchasers of hardware are attracted by the beautifully finished American work, which, although dearer, is infinitely more saleable than ours. Great and well-founded apprehensions are entertained that the

development of the immense mineral resources of Virginia will seriously affect, if not entirely extinguish, our iron trade with America."

How much or little of truth there may be in the statements above made concerning American steel boiler plates and finished iron for British consumption, we are not prepared to say. We have heard the stories, and are, consequently, disposed to receive them *cum grano salis*; but *Iron* is right in what it has to say about our growing trade with Canada, Australia and South America, and is probably not far astray in its predictions as to the ultimate benefits which will follow the development of the vast coal and iron resources of the Virginias. The probable rapidity of this development may be estimated from the fact that seven ore beds, seventeen coal mines and twelve furnaces are now in operation on or near the line of the Chesapeake and Ohio railroad. Kentucky, Tennessee and Alabama are also developing their iron resources, and in a few years the south will contribute largely to the iron production of the country. When that time comes we shall not only have no use for British iron, but we may have some of our own make to spare for such of our neighbors as may want it.

VIBRATIONS IN MACHINERY.

Sympathetic vibrations in machinery were illustrated, at the twenty-first meeting of the American Association for the advancement of science, held in Burlington, by experiments demonstrated by Prof. T. Lovering, of Harvard College. It was proved that all structures, large or small, simple or complex, have a definite rate of vibration, depending upon their materials, size and shape, and as fixed as the fundamental note of a musical chord. They may also vibrate in parts, as the chord does, and thus be capable of various increasing rates of vibration, which constitute their harmonies. If the body vibrates, all others in the neighborhood will respond, if the rate of vibration in the first agrees with their own principal or secondary rates of vibration, even when no more substantial bond than the air unites a body with its neighbors. In this way mechanical disturbances, harmless in their origin, assume a troublesome and

perhaps a dangerous character when they enter all too ready to move at the required rate, and sometimes beyond the sphere of their stability.

A fiddler wagered the workmen engaged in constructing the bridge at Colebrook Dale, the first iron bridge in the world, that he could fiddle their bridge down. This boast was treated altogether as a fiddle-de-dee, and the violinist was given permission to test his declaration. The musician tried note after note upon the gamut until he found the one which vibrated in sympathy with that of the bridge. The bridge answered to the music of the instrument, which was exhibited by the rapidly increasing vibration, to the astonishment and alarm of the contractors, who ordered the scientific fiddler to cease his working of such unheard of magic.

At one of the mills at Lowell, some years ago, the walls of the building and the floors mysteriously trembled from the motion of the machinery. The cause was for some time a mystery, as the phenomenon increased to such an extent that a pail of water would be emptied of its contents in a few hours. Investigation revealed that the machinery had been moving at a specific rate, which coincided with one of the harmonies of the structure, and the annoyance was obvious by a simple but effectual remedy, which consisted in making the power a little more or a little less than the previous rate.

In Virginia City, Nevada, a gentleman has placed on each side of the gravel walk leading from his front seat to his door, a handsome iron fence, the top rail of which is made of gas pipes filled with small holes. Before he thus fenced his walk he was much troubled by book agents, map peddlers, and other persistent people, but now all is lovely with him. When he sees a man enter his gate with books under his arm, he simply turns a cock and instantly a thousand streams of water dart across the whole length of the walk from side to side. The book peddler retreats to the gate, gazes wistfully up the walk for a time, concludes the man of the house does not want to see him, and then travels, wondering what sort of infernal machines people will next invent for the discouragement of honest industry. This invention is not patented.

CO-OPERATIVE FARMING.

Dr. Hexamer, one of our most intelligent and practical agriculturists, in an address at the Westchester County (N. Y.) Agricultural Fair, advocated co-operation in agriculture—carrying the idea that it would pay better to form stock companies and co-partnerships in farming by the same system that manufacturing is carried on. We think there is some good argument in favor of the plan. While farming pays, carried on by individuals on a small scale, suppose two or more farmers could join hands, enter into co-partnership, putting in their land as so much capital stock, having more or less cash capital to purchase the necessary machinery to carry on the business. Some of the advantages would be a combination of talent and knowledge of the business, each in charge of a department he is best adapted to, an economical division of labor as in other business, also a great saving in division fences, and in buildings, machinery and tools, as, for instance, one mowing machine would answer for the firm, one milk house for the milk produced, and instead of each farmer carrying the milk and butter to market from the separate farms, it would take no longer for one man to take the whole. The same advantages would apply to making the purchases for the whole establishment, and who does not know that supplies purchased in quantities, at a wholesale rate, is a large saving over small purchases? Besides the amount of labor from men and animals each having a particular work to perform is largely increased. It is easily understood that it does not cost five times more to cultivate five acres in one field, than it does to cultivate five fields in one acre each; nor does it cost ten times as much to make ten pounds of butter as it does to make one pound. But the main advantages would be in the use of more funds to carry on the business. Not only in the purchase of labor-saving implements, and the most profitable high-priced stock, but in selling direct to consumers, avoiding the commissions of all middlemen. These are some of the items suggested to us by the idea of farm co-operation. The main argument comes from illustrations furnished by co-partnership of other business. The larger and stronger firms,

with facilities for doing the largest business, control the markets, and have in many ways advantages over the smaller ones. This co-operative partnership already exists in the cheese and butter factories, in the ownership of blooded stock and in some kinds of farm machinery, why may it not extend to land and in the raising and selling of farm products?—*Exchange.*

SCREENS FOR FURNACES.

Every person who has visited iron works, has, no doubt, noticed the extremely uncomfortable condition of the puddlers, who are obliged, from the nature of their duties, to expose themselves to the intense heat of the furnaces, which materially interferes with the labor performed. This has been a source of annoyance to those engaged in this unpleasant occupation, and many experiments have been made with the view of protecting the workmen from the heat of these fires. It was not until recently that anything has been produced possessing the requisite qualifications. The plan which has been adopted in several European iron works consists of two screens, which cover the front of the furnace on either side of the puddling door, leaving the hole exposed. The outer screens are fixed by hooks to the top of the ordinary furnace front plates, and the middle screen is supported by a counter-balance weight in order to permit it at pleasure either to be lifted to uncover the puddling door when a ball is to be removed, or to be replaced to cover the door. The heat from the furnaces is received upon and absorbed by screens, which are kept cool by jets of water projected upon their outer sides by a horizontal water pipe near the top of the screens. The water runs down the screen in a continuous stream, and is conducted by troughs at the bottom of the screens, and by pipes to the bosh or water box used for cooling the puddlers tools, no more water being required than is usually necessary for supplying the said puddlers bosh or water box. This method has been found very effectual in protecting puddlers, and renders his occupation comparatively comfortable.

—◆◆◆—
Last words of Captain Jack: "I'll be hanged if I go up on that platform."

A FLOATING FIRE ENGINE.

A trial recently took place on the Thames of a floating fire engine, which is described by *Engineering*: The engine and pump have been placed in one of the ferry boats used for the purpose of carrying passengers across the river, and the chief reasons for adopting this arrangement are that it saves the large expense of building an independent vessel to contain the engine. The whole cost of fitting in the engine pump and piping amounts to only about £350, whereas the large floating engines on the Thames, including of course, the hulls, have cost about £8000. The pumps and engines are similar to those now being made by Messrs. Shand, Mason & Co., for their land engines, such as those exhibited at the Vienna Exposition. The engine is horizontal, with a single cylinder, and it has no fly wheel, although the crank is retained. An improved valve arrangement provides for a continuous rotary motion for the crankshaft. The crank is assisted past the dead centers by a piston fitted on the slide rod, that rod performing alternately the duties of a slide rod and connecting rod. There was a peculiarity to be dealt with in the present instance, arising from the circumstance that, whereas the land engines are worked with a pressure of from 100 lbs. to 150 lbs. on the square inch. The ferry engines work with only between 40 lbs. and 50 lbs. To make this clearly understood, it should be stated that the same boiler that supplies steam to the engine of the ferry boat, will be used in the case of a fire to work the engine of the pump, the steam being turned off from the ferry boat engine on arriving at the scene of the fire and thrown on to the fire engine. That same power of throwing the water might be produced with 50 lbs. of steam supplied by the boat engine as is usually had from the greater pressure in the boilers of the land engines, the area of the steam cylinder has been enlarged in order that power may be got up to meet the diminished pressure in the boilers. At the trial which took place on the Clyde on Monday afternoon, this arrangement was shown to be quite successful, as with only 48 lbs. of steam a water pressure of 120 lbs. was obtained.

Debt is never dignified.

A TIME RECORDING CLOCK.

A clock has been invented by an officer of the Western Union Telegraph Company, which at any time will print the year, month, day, hour and minute. It acts either automatically or by hand, as may be desired. The time-printer is worked by an electro-magnet. Use does not impair or affect it as a time-keeper. Behind the dial, which is of glass, and indicates the time, there is an adjustment of wheels and machinery connected with a small battery, and above all a small press, in appearance such as is used in canceling stamps, receipts, and like purposes. By placing at any hour of the day a slip of paper beneath the face of what appears to be an ordinary die, and pressing down the handle, there will appear instantaneously, printed in clear type, the year, month, day, hour and minute when it was done. This acts automatically, needs no regulation, is always correct, being connected with the chronometer which is regulated by the Washington Observatory, does not get out of order, as there is no friction, and it is about to be put into general use. The whole apparatus is not larger than an ordinary mantle time-piece, and is very easy to handle. Its advantages are manifold. It is to be used by persons in charge of railway stations, who will be required to obtain an impression of the hour when trains arrive, pass or leave the depot, thus tending to prevent accidents, and to hold the different employees to rigid responsibility, and placing the blame of failure in duty or accidents upon the proper persons. It will secure vigilance on the part of watchmen, who will be required at intervals during the night, to obtain impressions from the electric time-keeper, and thus give evidence of their fidelity to their trust. It is not possible to manipulate the machine so it will record other than the right time, and is a faultless sentinel of the passing hour.

Billings says: "Fuss works hard all day, and don't do enny thing, goes to bed tired at night, then gets up next morning, and begins agin whare she left oph."

A contemporary says that "Stray leaves from soon-coming orange blossoms flutter around in prophecy of weddings to be." Let 'em flut.

General Correspondence.

We do not hold ourselves responsible for the opinions of our correspondents.

Correspondents will please send in their manuscripts on or before the 12th of each month, so as to avoid being crowded out.

In order to insure insertion, all letters intended for publication, must be accompanied by the full name of the writer, not necessarily for publication, but as a guarantee of the good faith of the writer.

Equalization.

EVANSVILLE, IND., Nov., 1873.

MR. EDITOR—As there has been nothing in the JOURNAL lately on the subject of equalization, and as it is a subject that is of great interest to every member of the organization, it should be well understood. I never looked with much favor on the plan adopted by the International Union, and never thought that any Union would be benefited by it. But I fail to see why it can not be applied without injury to any Union. The report submitted by the committee on equalization to the I. U. provided that all regularly established revenues should be subject to equalization, after deducting hall rent, postage, sick benefits, etc., which was adopted with the amendment: "That the initiation fee subject to equalization be three dollars and no more." But upon reconsideration of the report of the committee on equalization of funds, it was resolved, that only 25 cents per month of the dues paid by members, be subject to equalization, and for the relief solely of the sick and disabled. It seems that the committee's report was amended by a resolution. A resolution, I believe, is supposed to be the feeling, or sentiment of persons congregated together, and the question of amending a committee report by a resolution is an open one, and of doubtful import. Cases can be cited, where resolutions were passed, and were thought by some to mean all that they conveyed; but the knowing ones laughed in their sleeves at the trick of making laws by resolutions. But supposing that the resolution amending the report is lawful in every respect, it does not affect the original report in any thing, except reducing the amount of funds subject to equalization, and specifying the purpose for which the money shall be used. I think it was the intent of the resolution to only assist those

Unions who were unable to pay benefits to their members; and in no wise was it intended to help Unions, however small, who had no members sick and entitled to receive benefits. Nor was it intended to help Unions, who paid out more than the whole amount of funds in their treasury, subject to equalization, but who having a balance in their treasury were still able to pay benefits.

The report of the committee reads, "that after deducting the amount actually necessary for hall rent, postage, stationery, &c., 25 cents per month of the monthly dues paid by members be subject to equalization, and for the relief solely of the sick and disabled." The last clause in the amendment repeals all that part of the report relating to the way and manner in which the President is instructed to proceed in equalizing the funds, because it states in plain words, that no Union need expect to receive any part of the equalization fund if they are able to pay benefits to their members. A Union that is able to care for its members does not need it, and a Union that has no members sick during the six months, need not expect any part of the fund, even if their treasury is empty and in debt; it is only intended for members sick and disabled whose Unions are not able to care for them let them be large or small.

It leaves the Executive of the I. U. nothing else to do, but to call on the Unions whose reports show that they have a surplus of money, left from the twenty five cents per month of the monthly dues after deducting the actual expenses, and to pay it out as far as it will go to those Unions who have members that have been sick and have not received benefits because of the poverty of their Unions.

WM. H. MILLER.

KEOKUK, IOWA, Nov., 1873.

MR. EDITOR—The school connected with our Union is in a flourishing condition. It meets every alternate Wednesday evening, and is largely attended. Each evening is closed with a lecture upon some subject connected with the sciences and is illustrated with experiments. Bro. J. Cooke's lecture on measuring the force exerted by a screw in pressing on car wheels, was a master piece and was received with applause. On last Wednesday evening, Bro. Robt.

Lamb delivered a lecture upon substituting mule power in place of horse power in rating engines, to a crowded house of not only members but a large number of invited ladies and gentlemen who were highly entertained. All who have the elevation of mechanics at heart are invited to attend our school free of charge; so far it has proved a grand success and we advise all sister Unions to try the experiment.

Fraternally, etc.,

J. G. C., Cor. Sec. No. 2 Ia.



STEVENS—MILLS—On the 10th of Nov., Bro. Charles Stevens, of No. 2 of Mich., to Miss Jennie Mills.

PHILLIPPS—SMITH—On the 12th of Nov., Bro. Edward Phillipps, of No. 2 of Mich., to Miss Annie Smith.

ELKEY—HARPFER—On the 27th of Nov., (Thanksgiving Day,) at the residence of the bride, Bro. Julius Elkey, of No. 2 of Mich., to Miss Caroline Harpfer.



CARNAHAN—Bro. John Carnahan, of No. 2 of La., died in Algiers. (Date and age not given.)

DYKEMAN—Bro. James A. Dykeman, of No. 8 of Mo., died in Texas. (Date and age not given.)

FINN—Bro. John Finn, of No. 3 of N. Y., died of bronchitis, in Troy. (Date and age not given.)

HARTNETT—Bro. Hartnett, blacksmith, of No. 1 Texas, died in Houston. (Date and age not given.)

LINDSAY—Bro. James K. Lindsay, of No. 3 of N. Y., died in Troy. (Date and age not given.)

PEOPLES—Bro. James Peoples, of No. 6 of Pa., died in Oil City. (Date and age not given.)

SUBSCRIPTIONS FOR THE JOURNAL.

NOVEMBER.

6, Cleveland, O.	\$ 4 50
8, Cleveland, O.	2 10
8, Amboy, Ill.	3 00
8, Baltimore, Md.	1 00
8, Omaha, Neb.	20 00
8, Memphis, Tenn.	1 00
10, Buffalo, N. Y.	1 00
10, Grand Rapids, Mich.	14 00
10, Buffalo, N. Y.	1 00
11, New Orleans, La.	1 00
13, Cincinnati, O.	1 00
13, Sioux City, Iowa.	5 00
13, Moberly, Mo.	1 00
13, Indianapolis, Ind.	1 00
13, Syracuse, N. Y.	1 00
16, Sterling, Ill.	3 00
17, Zanesville, O.	1 00
17, Cleveland, O.	2 00
17, Charlestown, Mass.	4 00
19, Carondelet, Mo.	1 00
19, Oswego, N. Y.	1 00
20, Louisville, Ky.	5 00
21, Ottumwa, Iowa.	2 00
21, St. Louis, Mo.	10 00
21, Rome, N. Y.	3 00
22, Cleveland, O.	1 00
24, Centralia, Ill.	2 00
24, Galesburg, Ill.	6 00
25, Boston, Mass.	1 00
28, Elmira, N. Y.	1 00
29, Louisville, Ky.	1 00
29, Amboy, Ill.	1 00

Total.....\$102 60

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WM. F. UPRIGHT, Sec'y.



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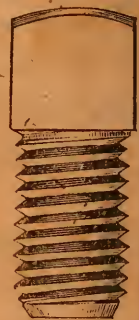
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